

WE CLAIM:

1               1. A hydrophilic polymeric medical article which has been  
2 impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a  
3 hydrophilic polymer; (ii) between 1 and 5 percent of chlorhexidine, wherein the  
4 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
5 chlorhexidine salt; and (iii) between .5 and 5 percent of triclosan.

1               2. The medical article of claim 1 which is fabricated from a  
2 hydrophilic polymer selected from the group consisting of natural rubber latex and  
3 biomedical polyurethane.

1               3. The medical article of claim 1 wherein the hydrophilic polymer in  
2 the treatment solution is a biomedical polyurethane.

1               4. The medical article of claim 2 wherein the hydrophilic polymer in  
2 the treatment solution is a biomedical polyurethane.

1               5. A hydrophilic polymeric medical article which has been  
2 impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a  
3 hydrophobic polymer; (ii) between 1 and 5 percent of chlorhexidine, wherein the

- 4       chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
5       chlorhexidine salt; and (iii) between .5 and 5 percent of triclosan.

1                     6.       The medical article of claim 5 which is fabricated from a  
2       hydrophilic polymer selected from the group consisting of natural rubber latex and  
3       biomedical polyurethane.

1                     7.       The medical article of claim 5 wherein the hydrophobic polymer in  
2       the treatment solution is a biomedical silicone polymer.

1                     8.       The medical article of claim 6 wherein the hydrophobic polymer in  
2       the treatment solution is a biomedical silicone polymer.

1                     9.       The medical article of claim 5 wherein the hydrophobic polymer in  
2       the treatment solution is a silicone-polyurethane copolymer.

1                     10.      The medical article of claim 6 wherein the hydrophobic polymer in  
2       the treatment solution is a silicone-polyurethane copolymer.

1                     11.      A hydrophobic polymeric medical article which has been  
2       impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a  
3       hydrophobic polymer; between 1 and 5 percent of chlorhexidine, wherein the

4 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
5 chlorhexidine salt; and (iii) between .5 and 5 percent of triclosan.

1                   12. The medical article of claim 11 which is fabricated from a  
2 hydrophobic polymer selected from the group consisting of polytetrafluoroethylene,  
3 Dacron, polyvinylchloride, biomedical silicone polymer, and silicone polyurethane  
4 copolymer.

1                   13. The medical article of claim 11 wherein the hydrophobic polymer  
2 in the treatment solution is a biomedical silicone polymer.

1                   14. The medical article of claim 12 wherein the hydrophobic polymer  
2 in the treatment solution is a biomedical silicone polymer.

1                   15. The medical article of claim 11 wherein the hydrophobic polymer  
2 in the treatment solution is a silicone-polyurethane copolymer.

1                   16. The medical article of claim 12 wherein the hydrophobic polymer  
2 in the treatment solution is a silicone-polyurethane copolymer.

1                   17. A hydrophobic polymeric medical article which has been  
2 impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a

3 hydrophilic polymer; (ii) between 1 and 5 percent of chlorhexidine, wherein the  
4 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
5 chlorhexidine salt; and (iii) between .5 and 5 percent of tricosan.

1               18. The medical article of claim 17 which is fabricated from a  
2 hydrophobic polymer selected from the group consisting of polytetrafluoroethylene,  
3 Dacron, polyvinylchloride, biomedical silicone polymer, and silicone polyurethane  
4 copolymer.

19. The medical article of claim 17 wherein the hydrophilic polymer is  
a biomedical polyurethane.

20. A method of preparing an infection resistant medical article

2 comprising:

3 (i) placing the medical article in an impregnating solution

4 comprising (a) a solvent selected from the group consisting of water, reagent alcohol,

5 tetrahydrofuran, and mixtures thereof; and (b) chlorhexidine and triclosan in a molar ratio

6 of between 1:1 and 1:3, wherein the total weight of chlorhexidine and triclosan is

7 between 1 and 10 percent of the weight of the impregnating solution and wherein the

8 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a

9 chlorhexidine salt;

1                   21. The method of claim 20, wherein the solvent in step (1)(a) is a  
2 mixture of reagent alcohol and tetrahydrofuran.

22. The method of claim 20, wherein the ratio of chlorhexidine free base and triclosan in step (1) (b) is about 1:2.

1                   23. The method of claim 20, wherein the total weight percent of  
2 chlorhexidine free base and triclosan in step (1) (b) is about 2-10.

1                   24. The method of claim 20, which has further been coated with a  
2 coating solution comprising a biomedical polymer.

1                   25. The method of claim 24, wherein the biomedical polymer in the  
2 coating solution comprises an antimicrobial agent.

1                   26. The method of claim 20 which is fabricated from polyurethane.

1                   27. The method of claim 26 which is a polyurethane catheter.

1                   28. The method of claim 27 in which both the external and internal  
2       surfaces of the catheter are brought into contact with the impregnating solution.

1                   29. The method of claim 27 in which only the external surface of the  
2       catheter is brought into contact with the impregnating solution.

1                   30. The method of claim 27, in which only the internal surface of the  
2       catheter is brought into contact with the impregnating solution.